

Notice of Allowability

Application No.

09/994,477

Examiner

Todd Ingberg

Applicant(s)

ABRARI ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/27/2005.
2. ☒ The allowed claim(s) is/are 2-5,9-17,23-24,28-30,40-44,47,48.
3. ☒ The drawings filed on 27 June 2005 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 8/19/05.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

TODD INGBERG
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Hans Troesch on August 19, 2005.

The application has been amended as follows:

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47. The method of claim [38] 40 ,further comprising:
displaying an incompleteness in the rule set by auto-creating and displaying rules having combinations of possible if-values not otherwise covered by the rule set; .and
displaying a logical ambiguity in the rule set by highlighting rules that can produce different actions for the exact same conditions.
48. The method of claim [38] 40 ,further comprising:
displaying a complex rule as multiple simple rules in response to a user request to expand the complex rule~ a complex rule being a rule having a do-not-care if-value for a condition, and each of the multiple simple rules having one of the possible if-values for the condition having the do-not-care value.

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47. The method of claim 40, further comprising:
displaying an incompleteness in the rule set by auto-creating and displaying rules having combinations of possible if-values not otherwise covered by the rule set; .and
displaying a logical ambiguity in the rule set by highlighting rules that can produce different actions for the exact same conditions.

48. The method of claim 40, further comprising:
displaying a complex rule as multiple simple rules in response to a user request to expand the complex rule a complex rule being a rule having a do-not-care if-value for a condition, and each of the multiple simple rules having one of the possible if-values for the condition having the do-not-care value.

REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance:

As per independent claims **2, 9 and 40**

Prior art of record fails to disclose the specifics of the user interface as found in independent claims. The closest prior art is:

A. Visual Modeling Technique Object Technology Using Visual Programming by Daniel Tkach et al, pages 33 - 334 shows the implementation of rules in a much different visual format.

B. Principles of Object Oriented Analysis and Design by James Martin on pages 146 – 149 shows the under lying concepts and screen shots of the Rules Editor a commercial product by IntelliCorp.

C. Template Software Reference – Template Software shows several different user interfaces with the rules editor.

Template also has a build your own Graphical User Interface (manual not made of record). Despite the flexibility of the development tool of Template the limitations as depicted below are supported in figures 17 and 18 as supported on page 18 of the Specification.

Distinguishing limitations are the combination of the following:

“...to: display the editable lists in a matrix structure of four quadrants, wherein an editable list of condition terms and an editable list of action terms are displayed in adjacent quadrants, and the editable list of if-values and the editable list of then-values are displayed in adjacent quadrants; and use adjacency of if-values and then-values to represent a conditional rule implementation, where when the specified conditions are true then the corresponding actions are executed.”

As per claims **23, 25, 30**, the limitation of using “a value of do-not-care” within a rule appears novel over prior art. The Examiner considered rejection with a “enum” data type. However, on page 16 of the Specification this feature is clearly build into the environment and invoked with a dash. An “enum” data type requires a programmer to define the user defined scalar.

As per claim 26, the editable list of conditions for interacting with business rules maintain an edible list of actions where the conditions and actions are linked by the combination of editable lists of conditional values (if-values) and editable list of then-values. The if-values and then-values are linked in the displayed lists. The display of a value set for each assignment action results in the values in the value set contain all the possibilities defined. The use of “pull-down”

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lists in graphical programming is well known to one of ordinary skill in the art. The use of constructing the constructs(“if-values” and “then-values”) of a business rule was not present in the prior art of record. In combination, with the linkages as described above the combination is deemed non obvious over prior art of record.

As per **claim 28** - the prior art of record fails to teach the limitation of a “display an incompleteness in the rule set by auto-creating and displaying rules having combinations of possible if-values not otherwise covered by the rule set.” The Template reference teach how to handle ambiguity but not incomplete rules.

As per **claim 29** - the prior art fails to teach “display a logical ambiguity in the rule set by highlighting rules that can produce different actions for the exact same conditions.” The Template reference teaches a copy of flows with a junction. Although, this is an action, it is not an action as a result of a rule.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

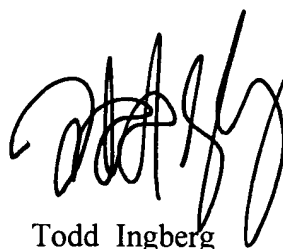
Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Todd Ingberg whose telephone number is (571) 272-3723. The examiner can normally be reached on during the work week..

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Todd Ingberg', with a long, sweeping line extending from the end of the signature towards the top right of the page.

Todd Ingberg
Primary Examiner
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